

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 5 and 11 in accordance with the following:

1. (CURRENTLY AMENDED) A method of storing program data, which is encoded by compression, comprising:

extracting information related to a desired program, which is to be referenced in reproducing the program data of the desired program, from the program data, the extracted information including information associated with an I-picture that is extracted by:

searching a transport stream (TS) for the I-picture, and

saving a start disk packet point and TS packet point if a current TS packet is related to the I-picture;

making a table of the extracted information, the table including only information to be referenced in reproducing the program data of the desired program at variable speed; and

storing the table having the extracted information ~~and with~~ the program data of the desired program in a storage apparatus,

wherein the program data is encoded by compression according to the MPEG-2 standard and packetized as packets in the form of the TS, and

wherein the extracting of the information comprises extracting a program allocation table (PAT), and a program map table (PMT), ~~wherein the extracting of the information comprises extracting location information of the I-picture, and the program data is stored in packets, and the extracting of the information comprises extracting description information of each packet and location information of the I-picture, and~~

wherein the program data of the desired program is reproduced by referring to the extracted information stored in the table.

2-4. (CANCELLED)

5. (CURRENTLY AMENDED) An apparatus ~~for to storing~~ a program which is encoded and packetized in transport stream (TS) packets according to an MPEG-2 standard, the

apparatus for storing a program comprising:

a TS demux which extracts program packets related to a program desired to be stored from the TS packets;

a TS demux control unit which controls the TS demux to extract the program packets, and extracts location information of an I-picture including extracting description information of each packet;

a control unit which:

buffers and outputs the program packets extracted by the TS demux,
extracts program allocation table (PAT), and program map table (PMT)

information related to the program desired to be stored from the program packets,

extracts information associated with the I-picture by searching the TS for the I-picture and saving a start disk packet point and TS packet point if a current TS packet is related to the I-picture, and

makes a program table having the extracted PAT information, and the PMT information, and the location information of the I-picture, including the description information, the program table including only information to be referenced in reproducing the program data of the desired program at variable speed; and

a storing apparatus which stores the program packets and the program table,
~~wherein the extracting of the location information comprises extracting description information of each packet~~

wherein the program data of the desired program is reproduced by referring to the extracted information stored in the table.

6. (ORIGINAL) The apparatus for storing a program of claim 5, wherein the control unit comprises:

a random-access-memory (RAM) which buffers and outputs the program packets detected by the TS demux; and

a central processing unit (CPU) which extracts the PAT information and the PMT information from the program packets stored in the RAM according to a predetermined program, and makes the program table.

7. (ORIGINAL) The apparatus for storing a program of claim 5, further comprising:

a digital interface unit which controls a direct memory access (DMA) operation between the storing apparatus and the control unit.

8-9. (CANCELLED)

10. (PREVIOUSLY PRESENTED) The apparatus for storing a program of claim 5, wherein the storing apparatus is a hard disc drive.

11. (CURRENTLY AMENDED) A method, comprising:

extracting information from program data stored in packets to be referenced during reproduction of the program data, the extracted information including information associated with an I-picture that is extracted by searching a transport stream (TS) stream for the I-picture and saving a start disk packet point and TS packet point if a current TS packet is related to the I-picture;

creating a table containing the extracted information, the table including only information to be referenced in reproducing the program data of the desired program at variable speed; and
storing the created table ~~and with~~ the program data in storage; ~~and~~
reproducing the program data of the desired program by referring to the extracted information stored in the table.

wherein the extracting of the information comprises extracting location information of the I-picture, and ~~the program data is stored in packets, and the extracting of the information comprises extracting~~ description information of each packet ~~and location information of the I-picture.~~

12. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the making a table of the extracted information comprises making a new PMT or PAT table.

13. (PREVIOUSLY PRESENTED) The method of claim 1, further comprising:

wherein the location information includes a disk packet number of a first one of the disk packets, a disk packet number of a last one of the disk packets, a TS packet number of a first one of the TS packets, and a TS packet number of a last one of the TS packets.